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ABSTRACT

Several of the available methods of program evaluation are discussed, with emphasis on adult basic education projects. The following evaluation models are presented: intuitive judgment, cost/benefit analysis, experimental research, and a synthetic approach which includes planning, action, and evaluation. The author also presents his Project Matrix, which integrates all six phases of the synthetic planning model--needs, goals, objectives, resources, actions, and the evaluation plan. A check list of key questions for project proposals, project action, and project evaluation is appended. (GDC)

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EVALUATING EDUCATION ACTION PROJECTS

by

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EVALUATING EDUCATION ACTION PROJECTS

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1. Background: In a large number of colleges in North America, the greater part, if not the whole of the Adult Basic Education (ABE) program is funded by special or renewable grants from the federal governments. This is instrumented in the U.S. by Title III, and in Canada by the Manpower Training Act. The use of these funds have expanded greatly, and for many colleges facing financial stringency from state and provincial governments these special projects may be the only way of providing ABE programs in their communities.

   The evaluation of such projects frequently, though seldom systematically, comes under scrutiny. Funding agencies want to know about program effectiveness so they can make more informed choices among competing project proposals; other colleges think about introducing similar projects and seek information about project aims, outcomes and costs; those involved in the projects -- the students, instructors and college administrators, as well as other people in community social agencies -- want answers to the basic questions about the project: questions such as:

   'What is the project trying to achieve?'
   'Why wasn't it being done before?'
   'What happens when the funding runs out?'
   'How well is the project doing anyway?'
   'How do you know?'

   How DO you know? That is the critical question faced by the project director and the project evaluator, as together or separately they turn to the accountability phases of the project.

This paper will examine some of the possible models available to the director of an education action project, as he seeks to provide evidence to the evaluator and others, of how the project is going and how he knows.

2. Definition: Weiss (1972) provides an operational definition of evaluation, within the context of 'social programs designed to improve the lot of people':

> ...to measure the effects of a program against the goals it sets out to accomplish, as a means of contributing to subsequent decision-making about the program and improving future programming.

The key words in this definition each raise critical questions for the project director: thus,

'measure'	What will be the research methodology?
'effects'	What are the outcomes? Cognitive? Affective? Systemic? How wide is to be the field of observation? Within what time-frame?
'goals'	What are the criteria for effectiveness? What are the broad aims of the project? What are the more specific objectives? Are the goals adequately specified? How quantitative or qualitative should they be?
'decision-making'	Who wants to know what about the project? In order to make what kinds of decisions?
'improving future programming'	How does the project fit within the context of the clients' lives, the needs of the community and society at large? What is its social purpose?

As the project director looks for a suitable model of evaluation, he hopes to find one which will help find the answers to such questions. There is an interesting range of evaluation models available. Let's look at a few prototypes in review.

3. Evaluation Models:

a. *The Intuitive Judgement, or 'Seat of the Pants' Approach:*
Once the most common approach, and still practised widely in many areas of education and training, this has come into some disrepute. The fall from grace has come about partly through the sloppy inadequacies and

excesses of the approach -- the criticisms are usually valid -- but has occurred also because of the recent ascendency of 'management-by-objectives', 'computer-assisted empirical research', and the tide of 'behavioral objectives' and 'accountability': all of those new words in our vocabulary, which are perhaps long-established concepts of good management of educational endeavours.

The 'seat-of-the-pants' approach consists essentially of a global look at a program, and on the basis of observations, intuitions and judgements, making a decision as to its value, effectiveness and 'success', or 'failure'. At its worst, this approach produces arbitrary, subjective decisions about future programming, is open to political maneuvering, institutional convenience, social face-saving, and financial expediency. At its best, it has been the approach which has supported thousands of valuable but 'immeasurable' social action programs. Indeed, it is still the method used by most of the people in the world to make their day-to-day life decisions. The cold truth for the project director, however, is that the exclusive use of the intuitive approach is unlikely to continue getting him grants to provide social action programs for those very people.

b. *The Cost/Benefit Approach:*

Founded, and often foundering, in the 'dismal science' of economics, this approach appears to offer salvation to those who seek a quantitative, 'dollars-and-sense' model for project evaluation. Civil engineers as well as social scientists have applied it with some success, and have not always confined themselves to the quantitative elements. Engineers and sociologists, for instance, can sometimes achieve a synthesis of ideas, in the cost/benefit analysis of projects such as flooding an upper river valley to create a dam and reservoir to provide benefits to the downstream community. There is, unfortunately, a temptation to apply the model simplistically to the evaluation of an education action program. The costs of a job-training program for chronically unemployed welfare

recipients, for instance, may be balanced against the apparent outcomes of the project: so many people are now working and paying this amount of taxes instead of receiving that amount of transfer payments.

The major limitations of this model are (1) that it is very easy to measure such elements as training costs, but more difficult to measure benefits to the clientele beyond the payroll slip; (2) that the evaluator must always apply an arbitrary and artificial time-frame -- how do we know how long a person is going to stay off welfare, especially at a period in the economy when even experienced and trained people are on the margins of the labor force?

Once again, we must conclude that the approach has its merits, but needs to be combined with other approaches for a social action evaluation.

c. *The Experimental Research Approach:*

Here, the options available to the project director are refreshingly diverse. Campbell and Stanley (1966) have written the classic catalog of research designs, which includes not only a range of rigorously-controlled 'true' experimental designs, but also a selection of 'quasi-experimental' models. While the former are seldom appropriate choices for evaluation research in the social field, because the programs under study rarely control for such elements as selection, maturation and extraneous variable, the latter group of quasi-experimental designs such as multiple time series, and use of 'comparison' rather than 'control' groups are very worthy of examination and trial.

The major limitations of the experimental research approach, are (1) it tends to focus exclusively on the <u>outcomes</u> of the project, neglecting both the <u>process</u> and the larger frames of reference, and (2) the researcher may become preoccupied with the design of the experiment, and seek desperately to hold all his variables constant at a time when the project requires many more 'degrees of freedom'. On the other hand, the approach

may be very relevant and appropriate to evaluation of a more established social program, as opposed to the innovative or prototype programs that are more characteristic of the field of adult basic education. (Suchman, 1970)

d. *The Synthetic Approach:*

Clearly, one can recognize the element of planning in each of the three approaches just reviewed. The approach that will now be proposed as a workable alternative is based on a synthetic planning model that has these characteristics:

(1) Six distinct but closely related elements of program planning are established. These are Needs, Goals, Objectives, Resources, Actions, and Evaluation Plan.

(2) The six elements provide the basis for the writing of the Proposal, the implementation and record of the Project, and the Evaluation.

(3) Evaluation is an integral part of the whole project, from the evaluation plan, through process evaluation to the final summative evaluation.

(4) The whole project is evaluated within the framework of the clientele, and agencies, the educational institution; the local community, and society at large.

(5) The approach plans to take into account the unexpected outcomes of the project.

The final section of this report reviews these characteristics within the Project Matrix provided in Figure 1. A checklist of key questions for Proposal, Implementation and Evaluation is given in Appendix A.

4. The Project Matrix

a. The Project Proposal:

The foundation for a good evaluation lies in the program proposal itself. If the six project elements are adequately dealt with in the proposal, then the proposal first provides the basis for the action that follows. It then provides the framework for the evaluation of the project, both the ongoing 'process' evaluation and the final 'summative' report. The Checklist (Appendix A) provides a list of questions that should generate an appropriate proposal.

b. The Project:

Outside the controlled research laboratory, there is seldom a perfect match between the six elements of the Proposal and the actual elements of the action project. Thus, new needs may be identified; goals and objectives can be added, modified or abandoned in the light of experience; resources are continually allocated and reassigned; the various activities and strategies that constitute the action of the program should be continually under review and modification; and as the project achieves results, these should provide guidance for further change and in the other elements of the project. Evaluation in the course of the project should lead to decisions that are recycled into the system in a continuous feedback pattern.

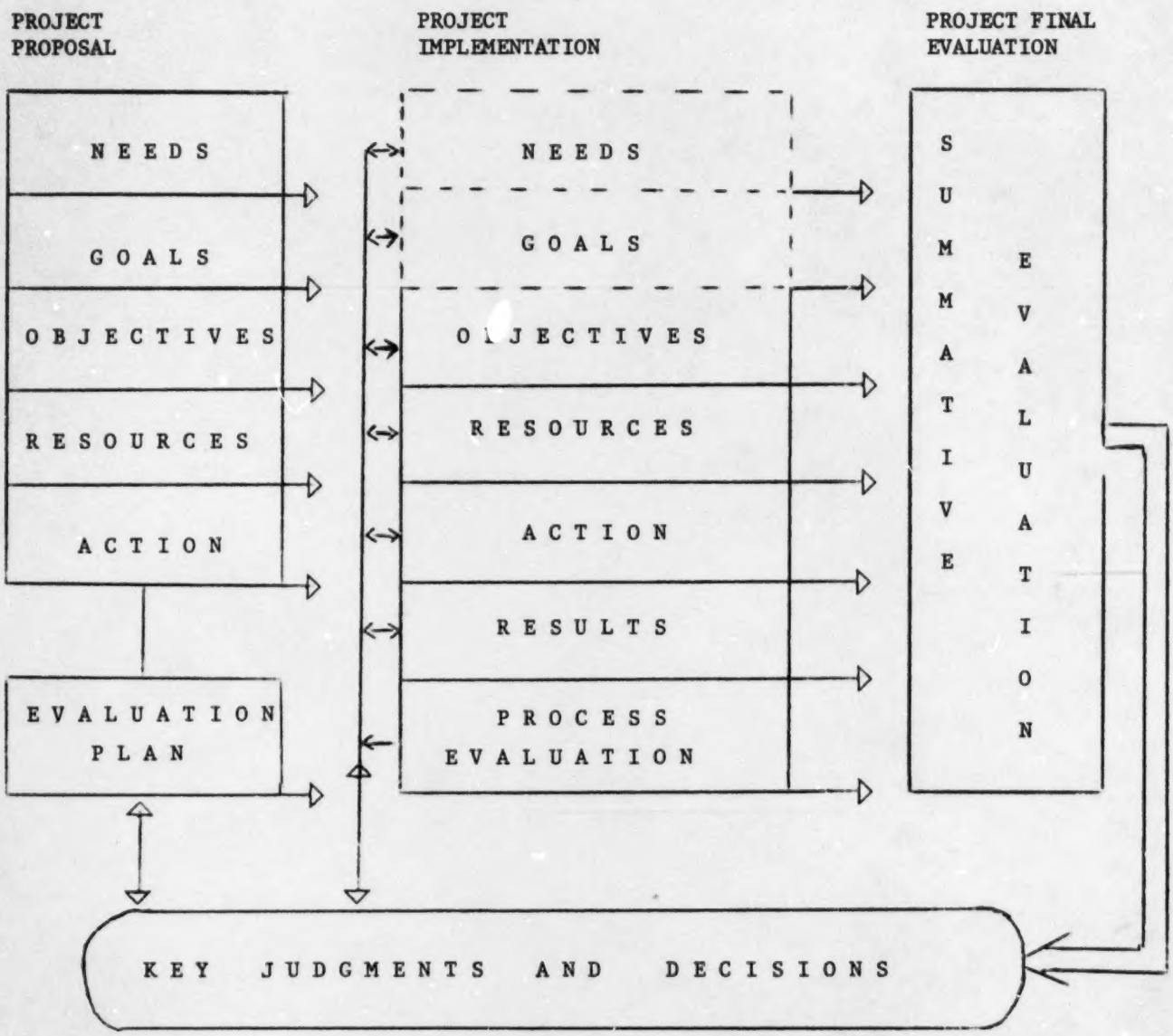
c. The Summative Evaluation:

If evaluation has in fact been continuing throughout the life of the project, it is unlikely that the final summative evaluation will hold many terrors or surprises. Use of the same format of elements enables comparisons to be made between what was planned, what actually occurred and what were the final outcomes.

It is important to note that the final evaluation will make special mention of the unanticipated outcomes, which may well prove occasionally to be the more 'significant' findings of the evaluation.

For instance, a goal of an ABE project might be 'to enroll more women in ABE classes'. Translated to a specific objective, this would become 'to make ABE tuition available during morning and afternoon hours'. In the life of the project, however, it might be found that a major problem of women attending class is the dearth of child-care facilities in the community. Thus, an unanticipated need is established, a new goal set: lobbying, say, for better child-care facilities, and the resultant action occurring of a student babysitting cooperative providing a stop-gap measure. The final evaluation should take into account the impact of the new service, not only on the women students (and their children), but on

FIGURE 1. THE PROJECT MATRIX



the awareness of the social agencies of that community, and perhaps the State, of the real-life problems of under-educated women seeking equality of opportunity in the labor market.

d. Process - the key to social change

Process is really the key variable in effecting social change. It is dynamic, multi-demensional, cognitive-affective and Yin-Yang in nature. It is omnipresent in any social action program. Indeed, an evaluation scheme which concentrates on outcomes to the exclusion of process is as negligent as one which does the opposite. Process evaluation is therefore shown as an essential element in the implementation of the social action project.

e. Key Judgement, Decisions and Recommendations; - The 'Cutting Edge'

The proposal writer, the project staff and the evaluator should each be aware of the decision-making framework in which they work and in which the project itself is integrated. In brief, they must know "WHO WANTS TO KNOW WHAT and WHY?"

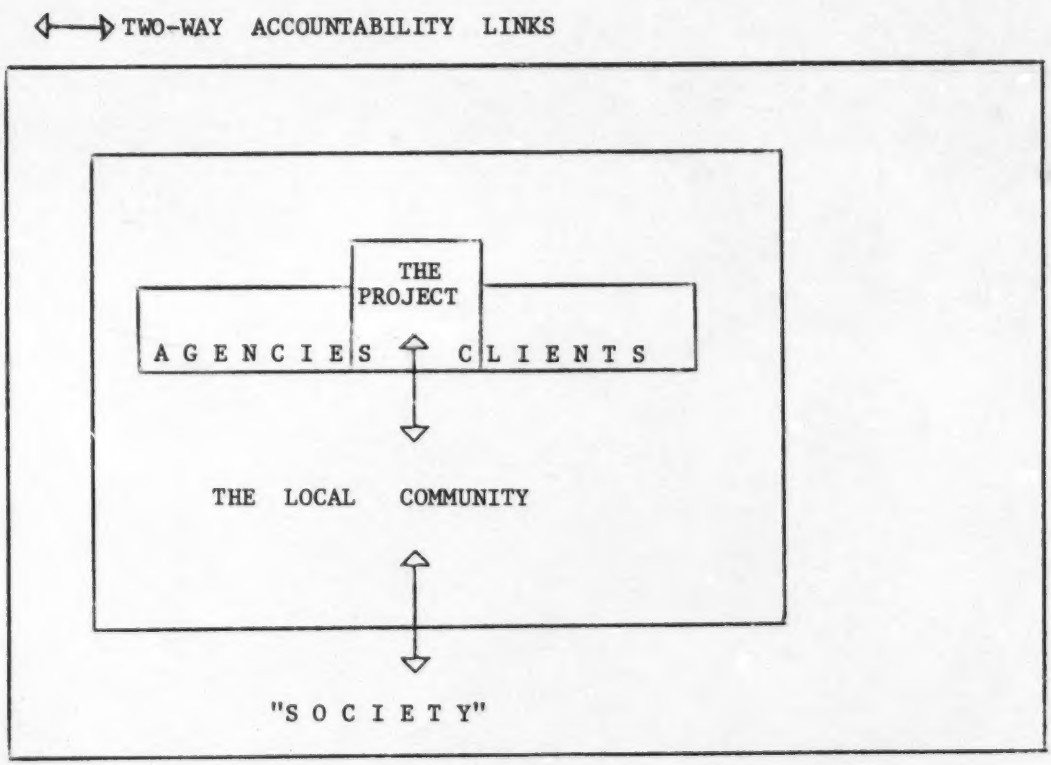
In proposal writing, the answers to that question should enable the writer to make an informed judgement about the absolute and relative value of the project and a decision to proceed or not.

In the implementation stage, the project director who knows the answers to that key question will be able to promote the project to the potential clientele and the community at large, and to keep his staff informed.

At the stage of summative evaluation, the evaluator who knows the answer to the key question will be able to better direct the content of the report to the respective readership. He will be aware of what kinds of decisions will be based on the final evaluation, and may make recommendations. He will have the freedom to go far beyond the mere recommendation of a GO-NO GO decision as to the continuance of a project, or a YES-NO decision on the 'success' of a project.

FIGURE 2.

SOCIAL CONTEXT OF THE EDUCATION ACTION PROJECT



5. The Social Context:

The evaluation of a social action program should be seen as occurring dynamically (i.e. formatively and summatively) within a larger context than just the world of the project itself. Clearly, this model has much in common with an ecological system. The model proposed in Figure 2 also suggests that the project and those who evaluate it are accountable in a variety of ways. In fact, there is a two-way accountability link (Roueche, 1975) between the following entities:

a. the project and its clientele
b. the project and the educational institution
c. the project and the sponsoring agency
d. the project (and all of the above) and its local community
e. the project (and all of the above) and society at large.

If these various frames of reference are taken into account in project proposals, project action and project evaluation reports, it seems likely that we may have more social action projects that are relevant, responsible and responsive to the people we intend to serve.

APPENDIX A

A Checklist of Key Questions for Project Proposals, Project Action and Project Evaluation

The following list of key questions could serve three separate functions:

(1) In its basic form it provides the foundation for planning and writing of the PROJECT PROPOSAL;

(2) With minor linguistic changes, such as verb tense, the same questions can provide guidance to the project director during the PROJECT ACTION; and

(3) Similarly, the key questions provide a frame work for the ongoing and final PROJECT EVALUATION.

1. NEEDS
   --What is the 'target population'?
   --What needs have been determined?
   --By what method; supported by what data, from which sources, at what what level of reliability?
   --Why have these needs not been met previously?
   --Why is this an appropriate time for the project?
   --What community agencies are, or should be concerned with the established needs of the target group?
   --What are the existing or proposed communication links between these agencies?

2. GOALS
   --How does this project propose to meet the defined needs?
   --What are the 'broad-aim' goals of the project?
   --How do they relate to the broad goals of the potential clientele? the sponsoring agency? the educational or social institution that will be responsible for the project?
   --How do the goals of the project relate to the local community? to the larger social context?

3. OBJECTIVES
   --What are the specific objectives of the project?
   --How are they best articulated in writing?
   --What are the cognitive objectives?
   --What are the affective objectives?
   --Which ones are probably measurable? (x-ref. to 'Evaluation')
   --How will the project allow for the integration of new and unanticipated objectives?

4. RESOURCES
   --What resources are already available?
   --What new resources will be required for use in what manner? with what flexibility?
   --What staffing? facilities? capital? operational materials?
   --What is the internal and external administrative structure of the project?
   --What is the actual and expected commitment of the agencies involved?
   --What is the financial control process and structure?
   --How much will the project cost?

5. ACTION

--How will the project work?
--What are the job descriptions and responsibilities?
--What is the content? (e.g. curriculum)
--What is the process? (e.g. teaching methods, assessments, etc.)

6. EVALUATION PLAN

--What is the proposed method of evaluation?
--What will be evaluated? By whom? Against what criteria?
--Have the costs for this evaluation been budgeted?
--What impact will the results of formative evaluation have on the ongoing project?
--Who will receive the findings of the evaluation(s)? When?
--What decisions/recommendations will be made, by whom on the basis of the reports?
--What will be the criteria for 'success'?
--What intermediate levels of 'success' will be identified?
--How will unexpected outcomes be dealt with?
--How will the evaluation approach itself be evaluated?

EVALUATING EDUCATION ACTION PROJECTS:

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INTERVIEWS

Allison Hughes, Grant Co-ordinator, Pima Community College, Tucson. Provided insights and practical examples of a management-by-objectives approach which has yielded results.

Richard Saltford, Assistant to the Dean, College of Education, University of Arizona. In addition to valuable personal perspective on evaluation, as a "proposal agent" for education action projects, provided the writer with "A Profile for Proposal Development", an excellent 3-page guide which provided much input to Appendix A of this paper.